

REMARKS

Claim Status

Claims 1-23 are now pending, with claims 1, 14, 19 and 20 being the only independent claims. Claims 1, 14, 19 and 20 have been amended. No new matter has been added. Reconsideration of the application, as herein amended, is respectfully requested.

Information Disclosure Statement

The Examiner has stated that French patent document No. 2733867 has been cited for incorporation by reference, but it has not been included in an Information Disclosure Statement (IDS). An IDS is being filed concurrently herewith to provide a copy of FR No. 2733867. Entry and acknowledgment that the IDS and the reference cited therein have been entered and considered is requested.

Overview of the Office Action

Claims 1, 14, 19 and 20 have been objected to for a minor informality. Withdrawal of this objection is in order, as explained below.

The disclosure of the specification has been objected to for a number of informalities. Withdrawal of this objection is in order, as also explained below.

Claims 1-23 stand rejected under 35 U.S.C. §101 as directed to non-statutory subject matter.

Claims 1-4, 6, 14-15, 17 and 21 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Pub. No. 2005/0157705 ("*Galetto*"). Claims 5, 7-9, 11, 12, 16 and 18 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Galetto* in view of "Estimating E-Model Id within a VoIP Network", Technical Report, pgs. 1-4, 2002 ("*Psytechnics*"). Claims 10, 19, 21, 22 and

23 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Galetto* in view of *Psytechnics*, and further in view of WO 2001/045291 (which corresponds to U.S. Patent No. 7,304,962 (“*Kirla*”). Lastly, claims 13, 17 and 18 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Galetto* and *Psytechnics*, and further in view of U.S. Patent No. 6,370,163 (“*Schaffer*”).

Applicants have carefully considered the Examiner’s rejections, and the comments provided in support thereof. For the following reasons, applicants respectfully assert that all claims now pending in the present application are patentable over the cited art.

Amendments Addressing Informalities

According to the Examiner (at pg. 3 of the Office Action), in claims 1, 14, 19 and 20, “the second speech signal is not reconstituted; it is generated from the reconstructed first signal. Therefore, to say it is reconstituted is incorrect (it is constituted)”. In response to this objection, applicants have amended claim 1 to recite “duplicating, at the receiver terminal, at least a portion of the speech signal reconstituted by the telephony module to constitute a second speech signal”. Claims 14, 19 and 20 have been correspondingly amended. Withdrawal of the objection is therefore deemed to be in order.

The Examiner has objected to the specification for containing embedded hyperlinks. In response to this objection, applicants have amended the specification in a self-explanatory manner. Withdrawal of this objection is also deemed to be in order.

Patentability of Independent Claims 1, 14, 19 and 20 under 35 U.S.C. §101

The Examiner (at pg. 5 of the Office Action) has stated that “the decoder and telephony module are described in the specification as software modules ... which are non statutory classes”. In response to this rejection, applicants have amended independent claim 1 to recite,

inter alia, “obtaining, at the receiver terminal, a stream of audio packets from the received data packets and decoding the audio packet stream within a predetermined decoding time to reconstitute a first speech signal from the received packets of the audio stream”. It is thus clear that now amended independent claim 1 recites steps of a method that are tied to another statutory class, i.e., to the receiver terminal which is clearly a hardware device.

With respect to claims 14-18, the Examiner asserts that “[a]lthough the claims recite insert device type elements, these elements are disclosed in the specification (Spec, Page 9, essentially software modules) as a software embodiment, and when treated as a whole, claims 14-18 are more toward a non-statutory embodiment and not necessarily a hardware embodiment. Applicants disagree. Nevertheless, independent claim 14 has now been amended to correspond to now amended independent method claim 1. Independent claim 14 is therefore directed to a device including “the network filter module”, “the control decoder module” and the “audio filter module” each of which is configured to function “at the receiver terminal” – itself hardware. The device is installed in a receiver terminal, which by nature is hardware. The device is described, for example at pg. 24, lines 1-5 of the originally filed specification or pg. 25, lines 1-5 of the substitute specification. That is, the device is either ROM, CD-ROM or a Semiconductor ROM, or magnetic storage means such as a diskette (floppy disk) or a hard drive. Applicants thus contend that independent claim 14 is directed, *inter alia*, to hardware and, therefore, this claim is directed to statutory subject matter.

The Examiner (at pgs. 5-6 of the Office Action) has stated that “the computer-readable information medium ... includes transmissible media, which does not fall into one of the four enumerated statutory categories of invention under 35 U.S.C. §101. Therefore, claims 19 and 20 are still non-statutory because they are embodied on non-statutory elements”. Applicants also disagree with this assertion.

As explained at pg. 25, lines 1-5 of the Substitute Specification filed on November 10, 2008, “[t]he information medium may be any entity or device capable of storing the program. For example, the medium may include storage means, such as a ROM, for example a CD-ROM or a semiconductor ROM, or magnetic storage means, for example a diskette (floppy disc) or a hard disc”. Independent claims 19 and 20 are directed to “[a] computer-readable information medium encoded with a computer program executed by a computer that causes evaluation of a processing delay of a speech signal contained in data packets received in a receiver terminal during a voice call to a terminal sending said data packets over a packet-switched network, the receiver terminal having a telephony module which generates a reconstituted speech signal from the received data packets”, and also recite the computer code for executing each corresponding method step of independent claim 1.

As also explained at pg. 25, lines 6-10 of the substitute specification, “the above medium may be a transmissible medium such as an electrical or optical signal, which may be carried by an electrical or optical cable, by radio waves or by other means; in particular, a program according to the invention may be downloaded via the Internet”. Applicants point out that the mere description in the specification of an allegedly non-statutory embodiment does not preclude applicants from claiming embodiments described in that same specification which are clearly statutory. In this instance, applicants have disclosed that the information medium may be any entity or device capable of storing the program that may include storage means, such as a ROM, for example a CD-ROM or a semiconductor ROM, or magnetic storage means, for example a diskette (floppy disc) or a hard disc. It is the information medium described at lines 1-25 at pg. 25 of the Substitute Specification to which applicants independent claims 19 and 20 are directed. Independent claims 19 and 20 are thus deemed to be directed to statutory subject matter.

In view of the foregoing, independent claims 1, 14, 19 and 20 as now amended are clearly directed to statutory subject matter; reconsideration and withdrawal of the rejection under 35 U.S.C. §101 are accordingly deemed to be in order, and notice to that effect is requested.

Patentability of the Independent Claims Under 35 U.S.C. §102(b)

Independent claim 1 has been amended to recite, *inter alia*, the steps of “obtaining, at the receiver terminal...”, “duplicating, at the receiver terminal... determining, at the receiver terminal...” and “calculating, at the receiver terminal”. No new matter has been added.

Galetto discloses a method for determining speech latency across a telecommunication network element (see paragraph [0001]). According to *Galetto*, “the present invention provides for the determination of speech latency across a communication network element by allocating a timestamp to the data packets of a sample of data packets representing a speech signal at input and output interfaces of the network element, recording the timestamps together with the corresponding data packets, decoding the recorded data packets at both interfaces to generate respective envelopes in the time domain, cross-correlating the envelopes to determine correlating areas of the envelopes, and determining a value for the speech latency from the timestamps associated with the correlating areas of the envelopes” (see paragraph [0008]). *Galetto* thus teaches that speech latency is measured across a network element, i.e., at the input/out of the network interface.

Galetto (paragraph [0012]) explains that “instead of analyzing a reconstructed speech signal at two terminating handsets in an end-to-end approach, the speech signals present at UMTS interfaces at the input and the output of a network element in question are analyzed, i.e., a device-to-device approach that directly processes speech packets at the UMTS interfaces to minimize unpredictable jitter or packet loss effects and to provide accurate measures across the

network element under test”. *Galetto* therefore expressly teaches away from measuring delay in the terminating handsets, or the receiver terminals. Rather, the delay is measured in the network itself, i.e., in a network element.

In the claimed invention, in contrast, at least two steps (i) and (ii) are performed in parallel in the receiver terminal to evaluate the speech signal processing delay (see paragraphs [0128] to [0142] of U.S. Publication No. 2006/0277051 (the instant specification)). Thus, the expressly recited steps of “obtaining...”, “duplicating...”, “determining...” and “calculating....” are all performed at the receiver terminal, as recited in now amended independent claim 1. *Galetto* thus fails to teach or suggest now amended independent method claim 1 for *at least* this reason.

Independent claim 14 defines a device associated with the claim method of independent method claim 1. Independent claims 19 and 20 each define a computer-readable information medium encoded with a computer program comprising program code associated with the claimed method of independent claim 1. Independent claims 14, 19 and 20 are therefore likewise deemed to be patentable over *Galetto* for at least those reasons discussed above with respect to independent claims 1 and 14.

In view of the foregoing, amended independent claims 1, 14, 19 and 20 are not rendered obvious and unpatentable by *Galetto*. Reconsideration and withdrawal of the rejection of claims 1, 14, 19 and 20 under 35 U.S.C. §103 are thus deemed to be in order, and early notice to that effect is solicited.

Patentability of Dependent Claims 5, 10 and 13 under 35 U.S.C. §103

The Examiner (at pg. 10 of the Office Action) acknowledges that *Galetto* fails to teach or suggest “the processing delay is obtained by summing the determined time difference between

the first and second speech signals and the predetermined decoding time of the first speech signals,” as recited in dependent claim 5, and cites *Psytechnics* for this feature.

The Examiner (at pg. 15 of the Office Action) also acknowledges that the combination of *Galetto* and *Psytechnics* fails to teach or suggest “the transmission delay of the speech signal in the packet switched network is evaluated using a Ping technique,” as recited in dependent claim 10, and cites *Kirla* for this feature.

The Examiner (at pg. 17 of the Office Action) also acknowledges that the combination of *Galetto* and *Psytechnics* fails to teach “sending said created end-to-end delay information over the packet-switched network to a collection server configured to manage end-to-end delay information sent by a plurality of communication terminals connected to the network,” as recited in dependent claim 13, and cites *Schaffer* for this feature.

Applicants, however, contend that no combination of *Galetto*, *Psytechnics*, *Kirla* and/or *Schaffer* achieves the subject matter of independent claim 1, from which claims 2, 3, 9 and 13 depend. There is simply nothing in *Psytechnics*, *Kirla* and/or *Schaffer* to cure the above-discussed deficiencies in *Kirla*, e.g., the lack of teachings relating to applicants’ claimed telephony module and/or the signals from which the first and second speech signals are reconstituted, as recited in now-amended independent claim 1.

Psytechnics discloses a “repeatable method of estimating VoIP network delay and provides guidance for [incorporation of the method] into E-model formulae” (see pg. 1). *Kirla* discloses “a method of providing information of the echo path of a speech connection in a Packet Data Network” (see pg. 1, lines 5-8). *Schaffer* discloses “a system and method for adaptive packet-length speech transport over a data network based on end-to-end transmission delay” (see col. 2, lines 15-20).

Psytechnics, Kirla and/or *Schaffer*, however, fail to teach or suggest anything whatsoever with respect to the claimed telephony module and the signals from which first and second speech signals are reconstituted, as in now-amended independent claim 1. Each of the cited references thus fails to teach or suggest the express recitations of applicants' independent claim 1. Since *Galetto, Psytechnics, Kirla* and/or *Schaffer*, individually or in combination, fail to teach or suggest the features recited in independent claim 1, dependent claims 5, 10 and 13 are deemed to be patentable based at least on their dependency from claim 1.

Dependent Claims

In view of the patentability of independent claims 1, 14, 19 and 20 for the reasons presented above, each of dependent claims 2-13, 15-18 and 21, as well as new dependent claims 22 and 23, is respectfully deemed to be patentable therewith over the prior art. Moreover, each of these claims includes features which serve to still further distinguish the claimed invention over the applied art.

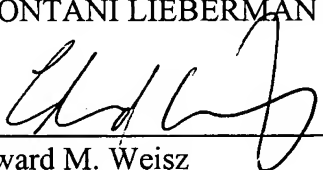
Conclusion

Based on all of the above, applicants submit that the present application is now in full and proper condition for allowance. Prompt and favorable action to this effect, and early passage of the application to issue, are solicited.

Should the Examiner have any comments, questions, suggestions or objections, the Examiner is respectfully requested to telephone the undersigned in order to facilitate an early resolution of any outstanding issues.

Respectfully submitted,
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